

**REPORT ON THE JANUARY 1, 2004
ACTUARIAL VALUATION OF THE
BELMONT CONTRIBUTORY
RETIREMENT SYSTEM**

June, 2004

June 18, 2004


Retirement Board
Belmont Contributory Retirement System
P.O. Box 56
Town Hall
Belmont, Massachusetts 02478-0900

Dear Members of the Board:

We have completed an actuarial valuation of the Belmont Contributory Retirement System as of January 1, 2004. The results are presented in this report.

The Table of Contents, which immediately follows, lists the material contained in the report.

Respectfully submitted,

A handwritten signature in black ink that reads "David Driscoll". The signature is written in a cursive style with a large 'D' at the beginning.

David L. Driscoll, F.S.A., E.A.
Principal, Consulting Actuary

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SECTION I - OVERVIEW

The Belmont Retirement Board has engaged Mellon to prepare an actuarial valuation of the Retirement System as of January 1, 2004. Employee data and asset information as of this date were provided by the Retirement Board.

The valuation was prepared pursuant to Chapter 32 of the Massachusetts General Laws, based upon the acceptance of Section 22D.

The purposes of the valuation are to:

- 1) analyze the current funded position of the Retirement System and determine the level of contributions necessary to assure sound funding;
- 2) update the Section 22D funding schedule currently in place for the Retirement System; and
- 3) provide reporting and disclosure information for financial statements, governmental agencies, and other interested parties.

Section II provides a summary of the principal valuation results. Section VI provides a projection of the Section 22D funding amounts. The assumptions used in this valuation are summarized in Schedule B of this report.

SECTION II - SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the valuation as of January 1, 2004, are summarized below along with a comparison with the amounts developed in the previous valuation as of January 1, 2002.

| Valuation Date | January 1, 2002 | January 1, 2004 |
|--------------------------------------|-----------------|-----------------|
| Active members: | | |
| Number | 443 | 421 |
| Annual compensation | \$ 14,536,443 | \$ 16,082,587 |
| Average age | 46.5 | 46.9 |
| Average service | 10.2 | 9.7 |
| Average compensation | \$ 32,814 | \$ 38,201 |
| Accumulated employee contributions | \$ 12,947,278 | \$ 12,960,944 |
| Pensioners and beneficiaries: | | |
| Number | 313 | 345 |
| Annual benefit payments ¹ | \$ 5,536,631 | \$ 6,833,056 |
| State-funded COLA payments | \$ 268,251 | \$ 238,254 |
| Net benefit (funded by town) | \$ 5,268,380 | \$ 6,594,802 |
| Average net benefit | \$ 16,832 | \$ 19,115 |
| Inactive employees | | |
| Number | 46 | 48 |
| Accumulated employee contributions | \$ 293,361 | \$ 374,257 |
| Assets for valuation purposes | \$ 52,838,407 | \$ 53,364,538 |
| Unfunded actuarial liability | \$ 34,337,667 | \$ 41,583,284 |
| Section 22D funding for fiscal 2006 | \$ 3,834,694 | \$ 4,099,337 |
| Funded percentage | 60.6% | 56.2% |

¹ Benefit amount includes cost-of-living adjustments implemented after July 1, 1981 and prior to July 1, 1998.

2. A projection of Section 22D costs is presented in Section VI.

3. Schedule B of this report outlines the full set of actuarial assumptions and methods employed. These assumptions have been changed in several respects from those used in the last valuation.
4. The provisions of the System are summarized in Schedule C. The valuation recognizes the adoption of Section 288 of Chapter 194 of the Acts of 1998 concerning the “Option (c) Pop-up” provision for members who retired prior to January 12, 1988. It also reflects the decision of the Retirement Board to recognize longevity payments to Police Officers in the computation of their pension benefits.
5. This valuation also reflects liabilities arising under the 2002 and 2003 Early Retirement Incentive (ERI) Programs. The additional liability associated with the 2002 ERI Program, under which retirement was elected only by three Housing Authority employees, was calculated by the Public Employee Retirement Administration Commission (PERAC) of Massachusetts as \$200,900. This liability is to be amortized in level annual installments over fiscal years 2004 through 2018. Twelve employees from various departments elected to retire under the 2003 ERI Program. We have calculated the additional liability associated with these retirements as \$618,459 as of January 1, 2004, and this liability is to be amortized in installments increasing at the rate of 4½% per year over fiscal years 2006 through 2025.

SECTION III - MEMBERSHIP DATA

1. In order to calculate the aggregate liabilities and assets on account of members of the System as of January 1, 2004, data were needed with respect to each active and retired member and beneficiary of the System. This was provided in electronic format by the Retirement Board.

2. From the data, tabulations were made showing, as of January 1, 2004, the number and annual compensation of members classified by age and years of service and the number and annual retirement allowances of retired members and beneficiaries as of January 1, 2004, classified by age. These tables are presented in Schedule D of this report.

3. The following tables show the number of active and retired members of the Retirement System as of January 1, 2004.

TABLE I

THE NUMBER AND ANNUAL COMPENSATION
OF ACTIVE MEMBERS
AS OF JANUARY 1, 2004

| GROUP | NUMBER | COMPENSATION |
|-------------------|--------|---------------|
| General Employees | 309 | \$ 9,718,725 |
| Police and Fire | 112 | \$ 6,363,862 |
| Total | 421 | \$ 16,082,587 |

TABLE II
THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF
RETIRED MEMBERS AND BENEFICIARIES
AS OF JANUARY 1, 2004

| Group | Number | <u>Annual Retirement Allowance</u> Total Pension | COLA* |
|------------------------|--------|---|------------|
| Service Retirements | 272 | \$ 5,475,636 | \$ 131,703 |
| Disability Retirements | 40 | \$ 860,563 | \$ 67,630 |
| Beneficiaries | 33 | \$ 496,857 | \$ 38,921 |
| Total | 345 | \$ 6,833,056 | \$ 238,254 |

* Amount shown under "COLA" is the sum of the adjustments made after July 1, 1981 and before July 1, 1998, which are funded by the State.

In addition, there are 48 inactive members with accumulated employee contributions of \$374,257.

SECTION IV - ASSETS

The asset value utilized in this valuation is based on financial information reported by the Retirement Board. As of January 1, 2004, the reported market value of the System's assets amounted to \$50,332,974. The actuarial value of assets for funding purposes is \$53,364,538. The actuarial value of assets is developed using a smoothing method that, as described in Schedule B of this report, moderates the impact of year-to-year fluctuations in asset values caused by investment gains and losses.

| | | |
|-----|---|------------------|
| 1. | Market value of System assets, January 1, 2003 | \$43,404,845 |
| 2. | Town and member contributions, net transfers and reimbursements in 2003 | 5,296,477 |
| 3. | Expenses in 2003 | (337,999) |
| 4. | Benefits and refunds in 2003 | (6,362,578) |
| 5. | Expected interest in 2003 | <u>3,518,154</u> |
| 6. | Expected market value of System assets, January 1, 2004 | 45,518,899 |
| 7. | Actual market value of System assets, January 1, 2004 | 50,332,974 |
| 8. | Investment gain (loss) for 2003, (7)-(6) | 4,814,075 |
| 9. | Investment gain (loss) for 2002 | (6,966,586) |
| 10. | Investment gain (loss) for 2001 | (5,625,393) |
| 11. | Investment gain (loss) for 2000 | (2,263,578) |
| 12. | Preliminary actuarial value of assets, January 1, 2004 [(7) – 80% X (8) – 60% X (9) – 40% X (10) – 20% X (11)] | 53,364,538 |
| 13. | 80% of market value of assets, January 1, 2004 = 80% X (7) | 40,266,379 |
| 14. | 120% of market value of assets, January 1, 2004 = 120% X (7) | 60,399,569 |
| 15. | Actuarial value of assets, January 1, 2004 [(12), but not less than (13) or greater than (14)] | 53,364,538 |

SECTION V - COMMENTS ON VALUATION

Schedule A of this report contains the results of the valuation, which include present and prospective assets and liabilities of the System as of January 1, 2004.

The schedule shows that the System has actuarial liabilities of \$115,644,349, of which \$60,461,429 is for benefits payable on account of present retired members and beneficiaries, \$54,808,663 is for benefits payable on account of present active members, and \$374,257 is for benefits payable on account of present inactive members. Against these liabilities, there are anticipated future contributions by members of \$13,448,210 and future normal contributions of \$7,248,317 payable by the Town. Subtracting these amounts from the total actuarial liabilities leaves \$94,947,822 as the actuarial accrued liability. Against this amount there are assets at actuarial value of \$53,364,538, which when subtracted from the accrued liability leaves \$41,583,284 as the unfunded actuarial accrued liability.

The normal contribution rate is 4.94% of annualized compensation.

SECTION VI - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

Section 22D of MGL Chapter 32 outlines various requirements of a funding schedule that will amortize the unfunded actuarial liability and cover normal costs. The normal cost and unfunded actuarial liability are to be calculated in accordance with the entry age normal actuarial cost method. Amortization of the unfunded actuarial liability is to be based on a schedule that ends no later than the year 2028. The contribution toward amortization of the unfunded actuarial liability may increase at an annual rate of $4\frac{1}{2}\%$.

The table on the following page presents a projection of contributions that meet the Section 22D requirements. The contributions were computed assuming that each fiscal year's contributions are to be paid in quarterly installments at the end of each calendar quarter. The normal cost is assumed to increase by 5% annually, while the unfunded accrued liability contribution increases at an annual rate of $4\frac{1}{2}\%$. The scheduled contribution for fiscal year 2005 has (except for the amount to be contributed in that fiscal year toward the cost of the 2002 ERI program) been maintained at the level set in the most recent prior funding schedule adopted by the Retirement Board. This schedule incorporates the funding required to provide annual COLAs under Chapter 17 of the Acts of 1997.

Pension Reform Act – Section 22D
Funding Requirements

| Fiscal Year Ending in | Normal Cost | Amortization of the Unfunded Actuarial | | | Total Town Contribution |
|--------------------------|----------------|--|----------|------------------------------------|----------------------------|
| | | Liability | | | |
| | | Active | 2002 ERI | Retired (excluding 2002 ERI) | |
| 2005 | \$1,065,846 | 495,648 | 24,081 | 2,102,970 | \$3,688,545 |
| 2006 | 914,854 | 388,665 | 24,058 | 2,771,760 | \$4,099,337 |
| 2007 | 960,597 | 406,155 | 24,058 | 2,896,489 | \$4,287,299 |
| 2008 | 1,008,627 | 424,432 | 24,058 | 3,026,831 | \$4,483,948 |
| 2009 | 1,059,058 | 443,531 | 24,058 | 3,163,038 | \$4,689,685 |
| 2010 | 1,112,011 | 463,490 | 24,058 | 3,305,375 | \$4,904,934 |
| 2011 | 1,167,612 | 484,347 | 24,058 | 3,454,117 | \$5,130,134 |
| 2012 | 1,225,993 | 506,143 | 24,058 | 3,609,552 | \$5,365,746 |
| 2013 | 1,287,293 | 528,919 | 24,058 | 3,771,982 | \$5,612,252 |
| 2014 | 1,351,658 | 552,720 | 24,058 | 3,941,721 | \$5,870,157 |
| 2015 | 1,419,241 | 577,592 | 24,058 | 4,119,098 | \$6,139,989 |
| 2016 | 1,490,203 | 603,584 | 24,058 | 4,304,457 | \$6,422,302 |
| 2017 | 1,564,713 | 630,745 | 24,058 | 4,498,158 | \$6,717,674 |
| 2018 | 1,642,949 | 659,129 | 24,058 | 4,700,575 | \$7,026,711 |
| 2019 | 1,725,096 | 688,790 | 0 | 4,912,101 | \$7,325,987 |
| 2020 | 1,811,351 | 719,786 | 0 | 5,133,146 | \$7,664,283 |
| 2021 | 1,901,919 | 752,176 | 0 | 5,364,138 | \$8,018,233 |
| 2022 | 1,997,015 | 786,024 | 0 | 5,605,524 | \$8,388,563 |
| 2023 | 2,096,866 | 821,395 | 0 | 5,857,773 | \$8,776,034 |
| 2024 | 2,201,709 | 858,358 | 0 | 6,121,373 | \$9,181,440 |
| 2025 | 2,311,794 | 896,984 | 0 | 6,396,835 | \$9,605,613 |
| 2026 | 2,427,384 | 0 | 0 | 0 | \$2,427,384 |
| 2027 | 2,548,753 | 0 | 0 | 0 | \$2,548,753 |
| 2028 | 2,676,191 | 0 | 0 | 0 | \$2,676,191 |
| 2029 | 2,810,001 | 0 | 0 | 0 | \$2,810,001 |
| 2030 | 2,950,501 | 0 | 0 | 0 | \$2,950,501 |
| 2031 | 3,098,026 | 0 | 0 | 0 | \$3,098,026 |
| 2032 | 3,252,927 | 0 | 0 | 0 | \$3,252,927 |
| 2033 | 3,415,573 | 0 | 0 | 0 | \$3,415,573 |
| 2034 | 3,586,352 | 0 | 0 | 0 | \$3,586,352 |
| 2035 | 3,765,670 | 0 | 0 | 0 | \$3,765,670 |

SCHEDULE A - RESULTS OF THE VALUATION

(Reflecting Chapter 17 COLA Legislation)

| 1. Present value of prospective benefits payable in respect of: | <u>January 1, 2002</u> | <u>January 1, 2004</u> |
|--|------------------------|------------------------|
| Present retired members and beneficiaries | \$50,653,114 | \$60,461,429 |
| Present active members | \$54,639,233 | \$54,808,663 |
| Present inactive members | <u>\$293,361</u> | <u>\$374,257</u> |
| Total actuarial liabilities | \$105,585,708 | \$ 115,644,349 |
| 2. Present value of future contributions by members | \$10,468,902 | \$13,448,210 |
| 3. Present value of future normal contributions by the Town | \$7,940,732 | \$7,248,317 |
| 4. Accrued liability, 1. - 2. - 3. | \$87,176,074 | \$94,947,822 |
| 5. Actuarial value of assets | \$52,838,407 | \$53,364,538 |
| 6. Unfunded accrued liability, 4. - 6. | \$34,337,667 | \$41,583,284 |
| 7. Funded ratio, 5. ÷ 4. | 60.6% | 56.2% |
| 8. Present value of future normal contributions by the Town, 3. | \$7,940,732 | \$7,248,317 |
| 9. Present value of future salaries of active members | \$ 131,319,000 | \$ 146,655,300 |
| 10. Normal contribution rate, 8. ÷ 9. | 6.05% | 4.94% |
| 11. Annualized compensation of active members below maximum retirement age | \$14,474,752 | \$15,976,639 |
| 12. Normal cost, January 1, 10. x 11. | \$875,722 | \$ 789,246 |
| 13. Normal cost, Town, next fiscal year | \$966,754 | \$871,289 |
| 14. Normal cost, employees, next fiscal year | \$1,107,552 | \$1,369,363 |

SCHEDULE B - ACTUARIAL ASSUMPTIONS AND METHODS

GENERAL EMPLOYEES

VALUATION INTEREST RATE: 8.25% per annum, compounded annually, net of administrative expenses.

PRE-RETIREMENT DEMOGRAPHIC ASSUMPTIONS: Representative values of the assumed annual rates of disability, death, service retirement, salary increase and withdrawal are as follows:

Annual Rates of

| Age | Disability | Death | | Service Retirement | | Years of Service | Salary Scale | Years of Service | Rates of Withdrawal |
|-----|------------|-------|--------|--------------------|--------|------------------|--------------|------------------|---------------------|
| | | Male | Female | Male | Female | | | | |
| 25 | .02% | .04% | .02% | | | 0 | 7.00% | 0 | 15.0% |
| 30 | .03 | .04 | .03 | | | 1 | 6.50 | 1 | 12.0% |
| 35 | .06 | .08 | .05 | | | 2 | 6.50 | 2 | 10.0% |
| 40 | .10 | .11 | .07 | | | 3 | 6.00 | 3 | 9.0% |
| 45 | .15 | .15 | .11 | | | 4 | 6.00 | 4 | 8.0% |
| 50 | .19 | .21 | .17 | 1.0% | 1.5% | 5 | 5.50 | 5 | 7.6% |
| 55 | .24 | .30 | .25 | 2.0 | 5.5 | 6 | 5.50 | 10 | 5.4% |
| 60 | .28 | .49 | .39 | 12.0 | 5.0 | 7 | 5.00 | 15 | 3.3% |
| 62 | .30 | .59 | .47 | 30.0 | 15.0 | 8 | 5.00 | 20 | 2.0% |
| 65 | .30 | .76 | .58 | 40.0 | 15.0 | 9+ | 4.75 | 25 | 1.0% |
| 69 | | .95 | .73 | 30.0 | 20.0 | | | 30+ | 0.0% |

COST-OF-LIVING ADJUSTMENTS: Retirement benefits are assumed to increase annually by 3%, up to a maximum of \$360.

DEATHS AFTER RETIREMENT: The RP-2000 Healthy Annuitant Table. For the period after disability retirement, the RP-2000 Healthy Annuitant Table set forward 2 years is used.

LOADING OR CONTINGENCY RESERVE: None.

ACTUARIAL COST METHOD: Aggregate entry age normal cost method.

ASSET VALUATION METHOD: For valuation purposes, assets are valued according to the following general formula, provided such value is within a 20% corridor of the market value:

$$VA = MV - .8I_1 - .6I_2 - .4I_3 - .2I_4 \text{ where}$$

$$VA = \text{Valuation assets.}$$

$$MV = \text{Market value of assets as of the valuation date.}$$

$$I_n = \text{Investment gain (loss) during } n^{\text{th}} \text{ year preceding the valuation date.}$$

POLICE AND FIRE

VALUATION INTEREST RATE: 8.25% per annum, compounded annually, net of administrative expenses.

PRE-RETIREMENT DEMOGRAPHIC ASSUMPTIONS: Representative values of the assumed annual rates of disability, death, service retirement, salary scale and withdrawal are as follows:

Annual Rates of

| Age | Disability | Death | | Service Retirements | Years of Service | Salary Scale | Years of Service | Rates of Withdrawal |
|-----|------------|-------|--------|---------------------|------------------|--------------|------------------|---------------------|
| | | Male | Female | | | | | |
| 25 | 0.20% | .04% | .02% | | 0 | 8.00% | 0 | 1.5% |
| 30 | 0.30 | .04 | .03 | | 1 | 7.50 | 1 | 1.5 |
| 35 | 0.30 | .08 | .05 | | 2 | 7.00 | 2 | 1.5 |
| 40 | 0.30 | .11 | .07 | | 3 | 6.50 | 3 | 1.5 |
| 45 | 1.00 | .15 | .11 | 1.0% | 4 | 6.00 | 4 | 1.5 |
| 50 | 1.25 | .21 | .17 | 2.0 | 5 | 6.00 | 5 | 1.5 |
| 55 | 1.20 | .30 | .25 | 15.0 | 6 | 5.50 | 6 | 1.5 |
| 60 | 0.85 | .49 | .39 | 20.0 | 7 | 5.50 | 7 | 1.5 |
| 62 | 0.75 | .59 | .47 | 25.0 | 8+ | 5.25 | 8 | 1.5 |
| 65 | 0.00 | .76 | .58 | 100.0 | | | 9 | 1.5 |
| 69 | | .95 | .73 | | | | 10 | 1.5 |
| | | | | | | | 11+ | 0.0 |

COST-OF-LIVING ADJUSTMENTS: Retirement benefits were assumed to increase annually by 3%, up to a maximum of \$360.

DEATHS AFTER RETIREMENT: The RP-2000 Healthy Annuitant Table. For the period after disability retirement, the RP-2000 Healthy Annuitant Table set forward 2 years is used.

LOADING OR CONTINGENCY RESERVE: None.

ACTUARIAL COST METHOD: Aggregate entry age normal cost method.

ASSET VALUATION METHOD: For contribution basis, assets are valued according to the following general formula, provided such value is within a 20% corridor of the market value:

$$VA = MV - .8I_1 - .6I_2 - .4I_3 - .2I_4 \text{ where}$$

$$VA = \text{Valuation assets.}$$

$$MV = \text{Market value of assets as of the valuation date.}$$

$$I_n = \text{Investment gain (loss) during } n^{\text{th}} \text{ year preceding the valuation date.}$$

SCHEDULE C - SUMMARY OF SYSTEM PROVISIONS

MEMBERSHIP

The Retirement System covers all employees of the Town of Belmont except teachers and elected officials and those employees in service at the time of its establishment who elected not to become members. Eligible employees in the Town who enter service on or after the date the System became operative for their classification may become members of the Retirement System on their own application.

SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS

A summary of the main benefit and contribution provisions of the Retirement System, as interpreted for the valuation, is presented below.

The terms “Group 1” and “Group 4” are used to denote “general employees” and “police and fire”, respectively.

BENEFITS

| | |
|----------------------------|--|
| Final Average Salary (FAS) | The average of a member’s 3 highest consecutive years’ compensation. |
|----------------------------|--|

Superannuation Retirement

| | |
|-------------|--|
| Eligibility | Age 65 for Group 1; Age 55 for Group 4. Maximum retirement age is 70 for Group 1 and 65 for Group 4. |
|-------------|--|

| | |
|-----------|--|
| Allowance | 2.5% per year of service times FAS. Veterans receive additional \$15 annually per year of service to a maximum of \$300 annually. Maximum total allowance is 80% of FAS. |
|-----------|--|

Early Retirement

| | |
|-------------|----------------------|
| Eligibility | 20 years of service. |
|-------------|----------------------|

Allowance Calculated as a superannuation retirement allowance (including veteran's benefits) except accrual rate is equal to 2.5% reduced by .1% for each year age at retirement is below either 65 for Group 1 or 55 for Group 4.

The minimum allowance after 30 years of service is equal to:

- (1) An annuity which is the actuarial equivalent of member's accumulated deductions; and
- (2) A pension equal to 1/3 of FAS and any veteran's benefits as described under superannuation retirement.

Vested Retirement

Eligibility 10 years of service. For certain involuntary terminations, this is reduced to 6 years.

Allowance A superannuation retirement allowance commencing at age 55 for Group 1 members and age 45 for Group 4 members or later, where the accrual rate is determined by the age of the member at the time the allowance commences.

Ordinary Disability

Eligibility For non-veterans, 10 years of service prior to age 55 for Group 1 members or age 45 for Group 4 members. For veterans, 10 years of service prior to maximum retirement age.

Allowance An immediate allowance equal to the age 55 rate for Group 1 members or age 45 rate for Group 4 members per year of service times FAS.

Veterans receive an allowance equal to:

- (1) An annuity which is the actuarial equivalent of their accumulated deductions; and
- (2) A pension which is the greater of 50% of current salary and the service retirement allowance to which they are eligible, if any.

Accidental Disability

Eligibility None.

Allowance An immediate allowance equal to:

- (1) An annuity which is the actuarial equivalent of the member's accumulated deductions; and
- (2) A pension equal to 72% of current salary; and
- (3) A supplement equal to \$450 per year per child under 21.

The maximum total allowance is 100% of current salary.

Accidental Death Benefit

Eligibility None.

Allowance An immediate allowance equal to:

- (1) A lump sum payment equal to the accumulated deductions at death; and
- (2) A pension equal to 72% of current salary and payable to the surviving spouse, dependent children, or the dependent parents; and
- (3) A supplement of \$312 per year per child payable to the spouse or legal guardian until all children reach age 21, unless handicapped.

The maximum total allowance is 100% of current salary.

Death in Active Service

Eligibility None.

Allowance An immediate allowance that would have been payable had the member retired and elected the 2/3 joint and survivor option on the day before his death. For death occurring prior to the minimum superannuation retirement age, the age 55 and age 45 accrual rates are used, respectively, for Group 1 and Group 4 members.

For members with at least 2 years of service at death, the surviving spouse receives an additional allowance equal to

the sum of \$960 per year for the first child and \$720 per year for each additional child.

The minimum allowance is \$140 per month. The maximum total allowance is 100% of salary at the date of death.

Normal Form of Benefit

Reduced modified cash refund annuity.

Optional Forms of Benefit

- (1) Life annuity.
- (2) Modified cash refund annuity.
- (3) 66-2/3% joint and survivor allowance with Pop-up.

Return of Contribution

If no other benefit is payable upon termination, the member's accumulated deductions are returned.

Post-Retirement Adjustments

Up to 3% of the annual retirement allowance up to a maximum of \$360 annually.

Member Contributions

Members contribute a percentage of annual regular compensation in accordance with their respective dates of hire, as shown below:

| <u>Date of Hire</u> | <u>Rate of Contribution</u> |
|-----------------------------|-----------------------------|
| Prior to January 1, 1975 | 5% |
| On or after January 1, 1975 | 7% |
| On or after January 1, 1984 | 8% |
| On or after July 1, 1996 | 9% |

Members hired on or after January 1, 1979 contribute an additional 2% of compensation in excess of \$30,000.

Longevity Payments to Police Officers

Longevity compensation provided to Police Officers pursuant to collective bargaining agreements is assumed to be included in the compensation upon which retirement benefits are based.

SCHEDULE D
MEMBERSHIP TABLES

TABLE 1
THE NUMBER AND ANNUAL COMPENSATION OF ACTIVE MEMBERS
DISTRIBUTED BY FIFTH AGE AND SERVICE
AS OF JANUARY 1, 2004

| | <i>0-4</i> | | <i>5-9</i> | | <i>10-14</i> | | <i>15-19</i> | | <i>20-24</i> | | <i>25-29</i> | | <i>30-34</i> | | <i>35-39</i> | | <i>40 and over</i> | | <i>TOTAL</i> | |
|---------------------|------------------|------------|------------------|------------|------------------|------------|------------------|------------|------------------|------------|------------------|------------|------------------|------------|----------------|------------|--------------------|------------|-------------------|------------|
| | <i>Salary</i> | <i>No.</i> | <i>Salary</i> | <i>No.</i> | <i>Salary</i> | <i>No.</i> | <i>Salary</i> | <i>No.</i> | <i>Salary</i> | <i>No.</i> | <i>Salary</i> | <i>No.</i> | <i>Salary</i> | <i>No.</i> | <i>Salary</i> | <i>No.</i> | <i>Salary</i> | <i>No.</i> | <i>Salary</i> | <i>No.</i> |
| <i>Under 20</i> | 38,120 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38,120 | 1 |
| <i>20-24</i> | 186,446 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 186,446 | 10 |
| <i>25-29</i> | 647,404 | 22 | 140,474 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 787,878 | 26 |
| <i>30-34</i> | 647,099 | 21 | 486,843 | 10 | 144,819 | 4 | 47,430 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,326,191 | 36 |
| <i>35-39</i> | 391,585 | 16 | 1,006,238 | 19 | 408,843 | 8 | 457,719 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,264,386 | 52 |
| <i>40-44</i> | 961,372 | 31 | 383,343 | 12 | 553,532 | 9 | 588,637 | 11 | 369,210 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,856,095 | 69 |
| <i>45-49</i> | 507,253 | 19 | 446,466 | 12 | 234,418 | 7 | 550,992 | 11 | 345,661 | 4 | 339,607 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 2,424,396 | 58 |
| <i>50-54</i> | 513,650 | 19 | 197,693 | 7 | 205,963 | 7 | 428,104 | 10 | 263,945 | 4 | 308,705 | 6 | 723,010 | 11 | 37,264 | 1 | 0 | 0 | 2,678,335 | 65 |
| <i>55-59</i> | 272,928 | 13 | 158,580 | 7 | 303,444 | 10 | 175,921 | 3 | 38,723 | 2 | 473,862 | 8 | 251,823 | 5 | 173,096 | 3 | 0 | 0 | 1,848,378 | 51 |
| <i>60-64</i> | 257,388 | 6 | 96,575 | 4 | 212,483 | 9 | 174,730 | 5 | 0 | 0 | 81,036 | 2 | 37,021 | 1 | 183,526 | 3 | 178,697 | 2 | 1,221,455 | 32 |
| <i>65-69</i> | 37,236 | 4 | 8,315 | 1 | 35,554 | 1 | 80,341 | 2 | 140,010 | 2 | 35,995 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 337,451 | 11 |
| <i>70 and over</i> | 11,378 | 2 | 34,983 | 2 | 35,002 | 4 | 0 | 0 | 0 | 0 | 2,496 | 1 | 29,595 | 1 | 0 | 0 | 0 | 0 | 113,454 | 10 |
| <i>TOTAL</i> | 4,471,859 | 164 | 2,959,511 | 78 | 2,134,058 | 59 | 2,503,875 | 52 | 1,157,549 | 18 | 1,241,701 | 23 | 1,041,449 | 18 | 393,886 | 7 | 178,697 | 2 | 16,082,586 | 421 |

TABLE 2

**THE NUMBER AND ANNUAL PENSIONS OF RETIRED MEMBERS AND BENEFICIARIES
DISTRIBUTED BY AGE AS OF JANUARY 1, 2004**

| Age | Service Retirements | | Disability Retirements | | Beneficiaries | |
|--------------|---------------------|------------------|------------------------|----------------|---------------|----------------|
| | Number | Annual Pension | Number | Annual Pension | Number | Annual Pension |
| Under 20 | 0 | 0 | 0 | 0 | 0 | 0 |
| 20 - 24 | 0 | 0 | 0 | 0 | 0 | 0 |
| 25 - 29 | 0 | 0 | 0 | 0 | 0 | 0 |
| 30 - 34 | 0 | 0 | 0 | 0 | 1 | 7,636 |
| 35 - 39 | 0 | 0 | 0 | 0 | 0 | 0 |
| 40 - 44 | 0 | 0 | 2 | 43,176 | 1 | 5,752 |
| 45 - 49 | 0 | 0 | 1 | 35,927 | 2 | 11,034 |
| 50 - 54 | 3 | 61,182 | 5 | 141,320 | 1 | 13,189 |
| 55 - 59 | 27 | 850,196 | 8 | 171,111 | 1 | 59,856 |
| 60 - 64 | 43 | 1,101,693 | 4 | 86,163 | 5 | 71,616 |
| 65 - 69 | 43 | 1,119,469 | 7 | 163,890 | 4 | 89,208 |
| 70 - 74 | 43 | 877,251 | 6 | 111,349 | 4 | 91,558 |
| 75 - 79 | 44 | 656,810 | 5 | 79,936 | 5 | 38,952 |
| 80 - 84 | 43 | 552,156 | 0 | 0 | 2 | 26,302 |
| 85 - 89 | 19 | 204,811 | 1 | 14,111 | 2 | 31,017 |
| 90 - 94 | 6 | 49,790 | 0 | 0 | 3 | 35,460 |
| 95 - 99 | 1 | 2,277 | 1 | 13,580 | 2 | 15,279 |
| 100 and over | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 272 | 5,475,636 | 40 | 860,563 | 33 | 496,857 |

“Annual Pension” is the total amount payable annually, including state-funded cost-of-living adjustments implemented after July 1, 1981 and before July 1, 1998.

SCHEDULE E - VALUATION RESULTS BY GROUP

AS OF JANUARY 1, 2004

| | | Town of Belmont | Housing Authority | Light Department | Water | School | Police & Fire | Total |
|-------------------------------|------|--------------------|----------------------|---------------------|-----------|-----------|------------------|------------|
| Active members: | | | | | | | | |
| Number | | 149 | 7 | 23 | 13 | 136 | 100 | 421 |
| Annual compensation | | 5,428,828 | 250,958 | 1,201,509 | 567,082 | 3,005,654 | 5,628,556 | 16,082,587 |
| Average age | | 47.9 | 50.7 | 45.9 | 50.5 | 46.6 | 41.8 | 46.9 |
| Average service | | 9.5 | 5.6 | 16.0 | 18.1 | 4.9 | 13.7 | 9.7 |
| Average compensation | | 36,435 | 35,851 | 52,240 | 43,622 | 22,100 | 56,286 | 38,201 |
| Accumulated contributions | | 4,546,783 | 128,292 | 1,178,534 | 585,744 | 1,448,542 | 5,073,049 | 12,960,944 |
| Pensioners and beneficiaries: | | | | | | | | |
| Number | | 97 | 8 | 31 | 14 | 63 | 132 | 345 |
| Annual benefit payments | | 1,649,303 | 109,391 | 514,908 | 245,697 | 642,163 | 3,671,594 | 6,833,056 |
| State funded COLA | | 52,782 | 2,760 | 16,963 | 14,341 | 30,893 | 120,515 | 238,254 |
| Net payments (funded by Town) | | 1,596,521 | 106,631 | 497,945 | 231,356 | 611,270 | 3,551,079 | 6,594,802 |
| Average benefit | | 16,459 | 13,329 | 16,063 | 16,525 | 9,703 | 26,902 | 19,115 |
| Inactive members: | | | | | | | | |
| Number | | 7 | 0 | 1 | 1 | 36 | 3 | 48 |
| Accumulated contributions | | 111,272 | 0 | 36,913 | 15,548 | 160,470 | 50,054 | 374,257 |
| Assets (actuarial value) | | 18,013,699 | 832,718 | 3,986,795 | 1,881,667 | 9,973,230 | 18,676,429 | 53,364,538 |
| Unfunded actuarial liability | | 14,070,009 | 886,691 | 3,313,900 | 1,436,777 | 7,615,220 | 14,260,687 | 41,583,284 |
| Funding for fiscal: | 2005 | 1,285,277 | 81,215 | 340,419 | 148,182 | 544,248 | 1,289,204 | 3,688,545 |
| | 2006 | 1,384,285 | 89,572 | 322,566 | 141,930 | 752,260 | 1,408,724 | 4,099,337 |
| | 2007 | 1,448,122 | 92,592 | 337,423 | 148,478 | 786,967 | 1,473,717 | 4,287,299 |
| | 2008 | 1,514,907 | 95,751 | 352,966 | 155,329 | 823,278 | 1,541,717 | 4,483,948 |
| | 2009 | 1,584,781 | 99,056 | 369,226 | 162,497 | 861,268 | 1,612,857 | 4,689,685 |